

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P188277

Luminaire Tested: **22SR-LD2-20-C-UNV-L840-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188277
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24796)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22SR-LD2-20-C-UNV-L840-CD1-BR-U
Description: METALUX 2X2 SKYRIDGE LED FIXTURE WITH BELLADONNA ROSE

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1184.0 lumens
Efficiency: N/A
Efficacy: 76.9 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 2.23 / 2.03
Luminous Opening: Rectangular (W 1.92' x L: 1.92' x H: 0')
CIE Type: Direct

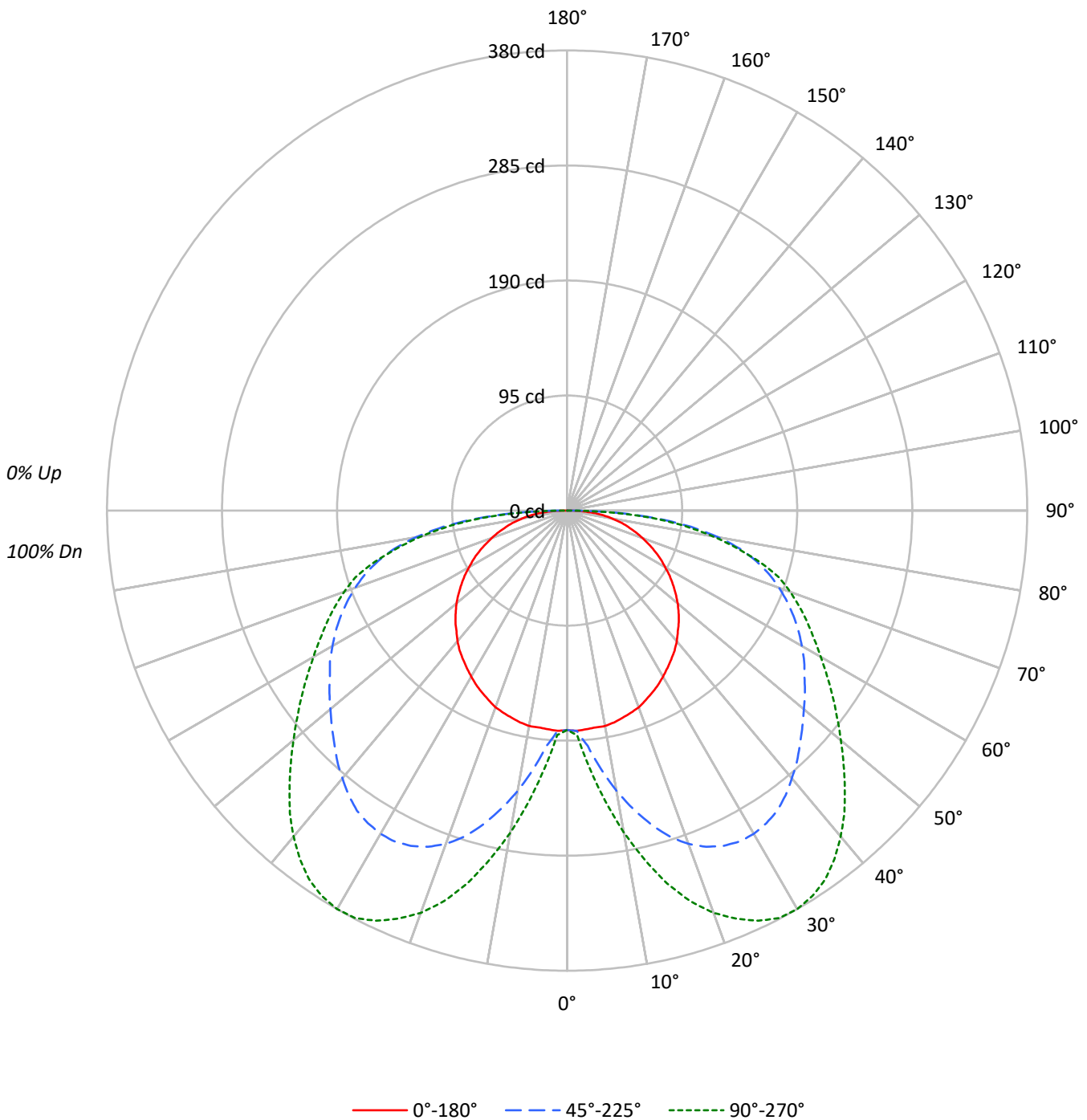
Input Watts (W): 15.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	106	100	95	90	103	98	93	88	93	89	86	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	79	73	68	76	71	66	73	68	64	62
3	85	73	64	56	83	72	63	56	68	61	55	66	59	54	63	57	53	50
4	78	64	54	46	75	63	53	46	60	52	45	57	50	45	55	49	44	42
5	71	56	46	39	69	55	46	39	53	45	38	51	44	38	49	43	37	35
6	65	50	41	33	63	49	40	33	47	39	33	46	38	33	44	37	32	30
7	60	45	36	29	58	44	35	29	43	35	29	41	34	28	40	33	28	26
8	56	41	32	26	54	40	32	25	39	31	25	38	30	25	36	30	25	23
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	20
10	48	34	26	20	47	34	26	20	33	25	20	32	25	20	31	24	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	531	531	531
5°	533	574	628
10°	537	699	803
15°	537	814	967
20°	539	913	1102
25°	537	987	1208
30°	536	1043	1286
35°	536	1082	1330
40°	539	1104	1344
45°	540	1127	1343
50°	543	1163	1345
55°	545	1222	1368
60°	547	1311	1418
65°	556	1431	1518
70°	567	1595	1678
75°	592	1832	1871
80°	636	2141	2059
85°	726	2508	2390



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.8	1.7
10°-20°	73.4	6.2
20°-30°	133.7	11.3
30°-40°	178.3	15.1
40°-50°	196.4	16.6
50°-60°	195.2	16.5
60°-70°	180.0	15.2
70°-80°	144.3	12.2
80°-90°	63.0	5.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	226.9	19.2
0°-40°	405.2	34.2
0°-60°	796.8	67.3
0°-90°	1184.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1184.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	181	181	181	181	181	
5°	181	183	195	208	213	17
15°	177	214	268	304	319	50
25°	166	230	305	355	374	77
35°	150	225	303	354	372	94
45°	130	203	272	312	324	101
55°	107	179	239	263	268	95
65°	80	151	206	216	219	79
75°	52	116	162	164	165	55
85°	22	53	75	70	71	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	181.3	181.3	181.3	181.3	181.3	181.3	181.3	181.3	181.3	181.3	181.3
2.5°	182.0	182.0	182.0	181.3	181.3	181.3	181.3	181.3	181.3	182.0	182.0
5°	181.3	181.3	182.0	181.3	182.0	183.4	185.5	189.0	191.1	195.2	198.0
7.5°	180.6	181.3	181.3	182.7	185.5	191.1	196.6	203.6	209.9	215.5	220.3
10°	180.6	180.6	181.3	184.8	192.5	201.5	210.6	218.9	226.6	235.0	242.0
12.5°	179.2	179.2	181.3	189.0	200.1	212.0	221.7	232.9	243.4	252.4	260.8
15°	177.1	177.8	182.0	193.1	207.1	220.3	232.9	245.4	258.0	268.5	278.2
17.5°	175.0	175.7	182.7	197.3	212.7	228.0	242.0	256.6	269.9	282.4	292.9
20°	172.9	172.9	183.4	200.1	216.9	234.3	249.6	265.0	279.6	292.9	304.7
22.5°	169.4	170.8	183.4	202.2	220.3	237.8	254.5	271.2	286.6	300.5	313.1
25°	166.0	168.0	182.7	202.2	221.0	239.9	257.3	274.7	290.8	305.4	318.7
27.5°	162.5	164.6	181.3	201.5	221.7	240.6	259.4	276.8	293.6	308.2	322.1
30°	158.3	161.8	179.2	199.4	220.3	239.9	258.0	276.1	292.9	308.2	322.1
32.5°	154.1	158.3	177.1	197.3	218.3	237.1	256.6	274.0	290.8	306.1	320.8
35°	149.9	154.1	173.6	194.5	214.8	234.3	253.1	270.5	286.6	302.6	315.9
37.5°	145.7	150.6	169.4	190.4	210.6	229.4	248.2	265.7	281.7	296.3	309.6
40°	140.9	146.4	165.3	185.5	205.0	223.8	242.0	258.7	274.7	288.7	301.2
42.5°	135.3	141.5	160.4	180.6	200.1	218.3	236.4	252.4	267.1	281.0	292.9
45°	130.4	137.4	155.5	175.0	194.5	212.0	230.1	245.4	259.4	271.9	283.1
47.5°	124.8	132.5	150.6	169.4	188.3	206.4	223.1	237.8	251.0	263.6	274.0
50°	119.2	126.9	145.0	163.9	182.7	200.1	216.2	230.8	243.4	255.2	265.0
52.5°	113.0	122.0	139.5	158.3	176.4	193.8	209.2	223.8	236.4	247.5	255.9
55°	106.7	115.7	133.9	152.7	170.1	187.6	202.9	216.9	228.7	239.2	247.5
57.5°	100.4	110.2	128.3	146.4	163.9	181.3	195.9	209.9	221.7	232.2	239.2
60°	93.4	104.6	122.0	140.2	157.6	174.3	189.7	202.9	214.1	223.8	230.1
62.5°	87.2	98.3	115.7	133.2	150.6	167.3	182.7	195.9	206.4	215.5	221.0
65°	80.2	91.3	108.8	126.2	142.9	159.7	175.0	187.6	198.0	206.4	211.3
67.5°	73.2	85.1	101.8	118.5	136.0	152.0	166.7	179.2	189.0	196.6	200.8
70°	66.2	78.1	94.1	110.9	127.6	143.6	157.6	170.1	179.2	186.2	189.7
72.5°	59.3	71.1	86.5	102.5	118.5	134.6	147.8	159.7	168.0	175.0	177.8
75°	52.3	63.5	78.1	92.7	108.1	124.1	136.7	147.8	156.2	161.8	163.9
77.5°	45.3	55.8	69.0	83.0	97.6	112.3	124.8	134.6	141.5	146.4	147.8
80°	37.7	47.4	59.3	71.8	84.4	98.3	108.8	117.8	124.1	126.9	126.2
82.5°	30.0	37.7	47.4	57.9	68.3	80.2	89.3	96.2	101.1	103.2	101.8
85°	21.6	26.5	32.8	40.4	48.8	57.9	64.8	69.7	73.2	74.6	73.2
87.5°	11.2	12.6	15.3	18.8	23.7	30.0	34.2	38.4	38.4	39.7	39.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	181.3	181.3	181.3	181.3	181.3	181.3	181.3	181.3
2.5°	182.7	182.7	183.4	184.1	184.1	184.1	184.1	185.5
5°	202.2	204.3	207.1	209.2	209.9	210.6	212.0	213.4
7.5°	224.5	228.7	231.5	236.4	237.8	239.2	239.9	242.0
10°	248.2	253.8	257.3	261.5	265.0	266.4	267.8	269.9
12.5°	267.8	274.7	280.3	285.9	288.7	292.2	292.9	295.0
15°	287.3	295.0	301.2	307.5	311.7	314.5	316.6	318.7
17.5°	303.3	311.0	318.7	326.3	330.5	334.0	336.1	338.2
20°	315.2	324.9	333.3	341.0	345.2	349.3	351.4	353.5
22.5°	324.2	334.7	343.8	351.4	357.0	361.9	364.0	364.7
25°	331.2	341.7	351.4	359.1	365.4	370.3	372.4	373.7
27.5°	334.7	345.9	356.3	364.7	371.0	375.8	377.9	379.3
30°	335.4	346.6	357.0	365.4	371.7	376.5	378.6	380.0
32.5°	333.3	345.2	354.9	363.3	369.6	374.4	376.5	377.2
35°	328.4	340.3	350.0	357.7	364.0	368.2	371.0	371.7
37.5°	321.4	332.6	341.7	349.3	355.6	359.8	361.9	362.6
40°	313.1	322.8	331.9	338.9	344.5	348.6	350.7	351.4
42.5°	304.0	313.1	320.8	327.7	332.6	336.1	338.2	338.9
45°	293.6	301.9	309.6	315.2	319.4	322.1	324.2	324.2
47.5°	283.1	290.8	297.7	301.9	305.4	307.5	308.9	309.6
50°	273.3	280.3	285.2	289.4	292.2	293.6	295.0	295.0
52.5°	263.6	269.2	273.3	276.1	278.9	279.6	281.0	281.0
55°	254.5	258.7	262.2	264.3	265.7	266.4	267.1	267.8
57.5°	244.7	248.2	250.3	251.7	253.1	253.8	253.8	254.5
60°	235.0	237.8	239.2	239.9	240.6	241.3	242.0	242.0
62.5°	224.5	226.6	227.3	228.0	228.7	229.4	230.1	230.1
65°	214.1	215.5	215.5	216.2	216.9	218.3	218.3	218.9
67.5°	202.9	203.6	203.6	204.3	205.0	206.4	207.1	207.8
70°	191.1	191.8	191.8	192.5	193.1	193.8	195.2	195.9
72.5°	178.5	178.5	178.5	179.2	180.6	181.3	182.7	183.4
75°	164.6	163.9	164.6	163.9	163.9	164.6	164.6	165.3
77.5°	147.1	145.0	143.6	142.9	142.2	142.2	142.9	143.6
80°	124.8	122.7	121.3	120.6	120.6	121.3	121.3	122.0
82.5°	101.1	99.0	97.6	97.6	96.9	97.6	97.6	98.3
85°	73.2	71.8	70.4	69.7	69.7	70.4	70.4	71.1
87.5°	39.0	38.4	37.7	37.7	36.3	37.7	37.7	37.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)